US NAVY ACTIVE DUTY EYE INJURY SUMMARY CALENDAR YEAR 2004

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2013



INTRODUCTION: In 2010 the Armed Forces Health Surveillance Center (AFHSC) and Tri-Service Vision Conservation and Readiness Program (TSVCRP) of the US Army Public Health Command (USAPHC) began development of an Annual Active Duty Military Eye Injury Summary that would detail cause and type of injury along with demographics of eye injuries (Age, Gender, Rank, Occupational Group).

The first edition of the summary and annual summarys back through calendar year 2000, were produced in the spring of 2011. An analysis of years 2000-2010 was published in the May 2011 Medical Surveillance Monthly Report (MSMR). The AFHSC also developed a Case Definition for Eye Injuries that details the code set and methodology used to develop the summarys. Both the MSMR Article and Case Definition for Eye Injuries are available on the AFHSC website: http://afhsc.army.mil/home.

This summary contains detailed data, along with a set of summary tables detailing Ambulatory and Hospitalization rates (per 1000 person-years) for Injury Group, Cause of Injury and Occupational Group. Summary tables for Deployment-Associated Eye Injuries detailing frequency of Eye Injuries by Type of Injury and Occupational Group are also provided. Occupational Group data is for Enlisted members only. Deployment-Associated Eye Injuries are presented without regard to Ambulatory or Hospitalized status.

As one of the underlying goals of the summary is to make eye injury surveillance data accessible and useable, individual annual eye injury summarys for all years and all services (Combined DoD, Army, Navy, Air Force, Marine Corps and Coast Guard) are posted on the USAPHC public website.

For questions or additional information regarding the summarys please contact the TSVCRP:

By Email: <u>usarmy.apg.medcom-phc.mbx.dcpm-tri-service-optometry@mail.mil</u> Telephone: 410-436-2714 FAX: 410-436-1325

Additional program information and educational materials can be found at: http://dodvision.com/ and the USAPHC Public Website at: http://phc.amedd.army.mil/Pages/default.aspx

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- 1) Summary of Code Groupings
- 2) All diagrams by Injury Group
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- 4) All diagrams by Occupational Group
- 5) Deployment-Associated Eye Injury data not available from 2000-2004
- 6) 2004 Navy Eye Injury complete statistics

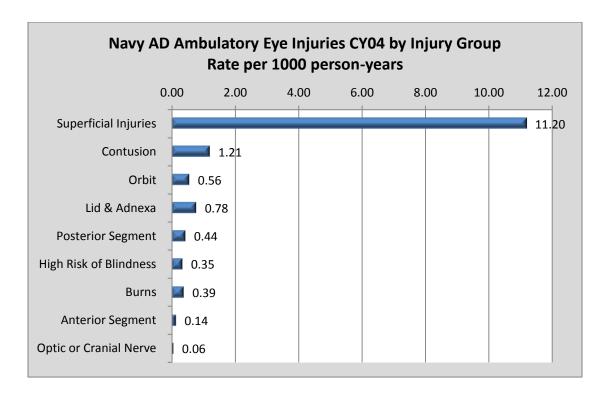


INJURY CODE GROUP DETAILS: The following code groupings were used to develop the summary. Additional details may be found in the AFHSC Case Definition available at: http://afhsc.army.mil/home.

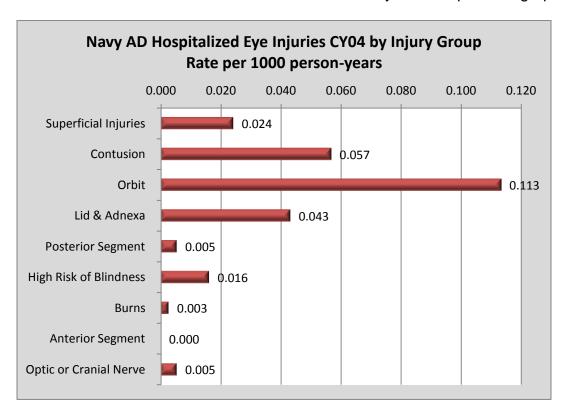
- 1) Superficial: all 918 series codes (superficial injury of eye and adnexa) and all 930 series codes (foreign body on external eye).
- 2) Contusion: all 921 series codes (contusion of eye and adnexa).
- **3) Orbit**: All 802 series codes (fracture of face bones), 870.3 and 870.4 (penetrating wound of orbit without and with foreign body) and 376.32 (orbital hemorrhage).
- **4)** Lid/adnexa: all 870 series codes (open wound of ocular adnexa) with the exception of 870.3 and 870.4 (see orbit above).
- **5) Posterior segment**: 362.81 (retinal hemorrhage), all 361.0x series codes (retinal detachment with retinal defect), 363.61 (choroidal hemorrhage, unspecified), 363.63 (choroidal rupture), 379.23 (vitreous hemorrhage), 360.00 and 360.01 (purulent and acute endophthalmitis).
- 6) High risk of blindness: all 871 series codes (open wound of eyeball).
- **7) Burns**: all 940 series codes (burn confined to eye and adnexa) as well as all 940.x2 codes (burns to eye with other parts of face, head and neck).
- **8) Anterior segment**: 364.41 (hyphema), 366.21 and 366.22 (localized and total traumatic cataract), and 364.76 (iridodialysis).
- 9) Optic/cranial nerve: 950.0 (optic nerve injury), 950.1 (injury to optic chiasm), 950.9 (injury to optic nerve and pathways, unspecified), 951.0 (injury to oculomotor nerve), 951.1 (injury to trochlear nerve) and 951.3 (injury to abducens nerve).

DETAILS FOR TOTAL NUMBERS: Because patients may have been coded with more than one injury group or cause of injury, the sum of cases by injury group and the sum of cases by causes of injury will be greater than the total number of patients.

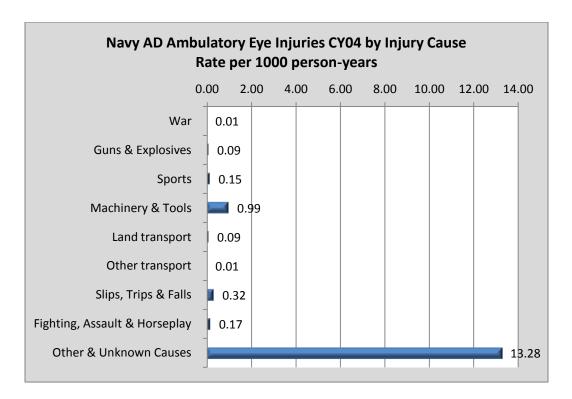




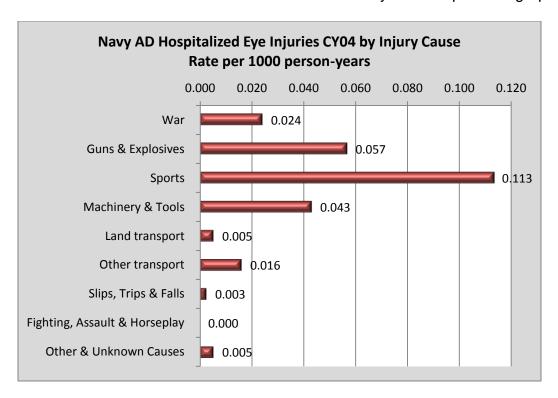
Please note the difference in scale between Ambulatory and Hospitalized graphs



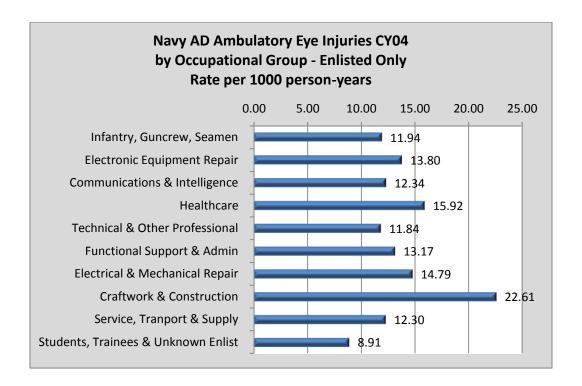




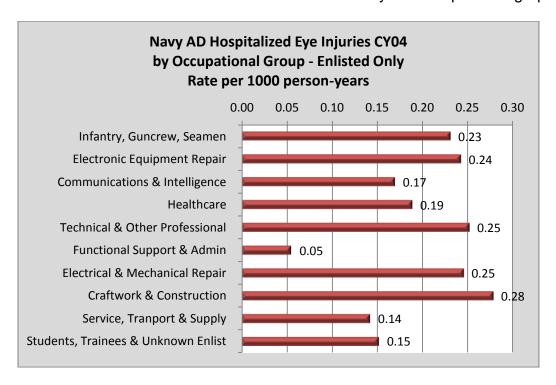
Please note the difference in scale between Ambulatory and Hospitalized graphs







Please note the difference in scale between Ambulatory and Hospitalized graphs





	2004											
	Ambulatory MTF Visits			Deployment-Associated Healthcare				Hospitalizations				
		nary		gnoses		nary		gnoses		nary	All Dia	
ALL ACTIVE COMPONENT	Count	Rate ¹	Count	Rate	Count	% total ³	Count	% total ³	Count	Rate	Count	Rate
ALL ACTIVE COMPONENT Total	4,799	12.92	5,306	14.29		_	_	-	18	0.05	72	0.1
Total	4,155	12.52	3,300	14.25					10	0.03	,,,	0.1
Superficial Injuries	3,888	10.47	4,160	11.20	-	-	-	-	4	0.01	9	0.0
Contusion	359	0.97	447	1.21	-	-	-	-	8	0.02	21	0.0
Orbit	165	0.45	209	0.56	-	-	-	-	15	0.04	42	0.1
Lid & Adnexa	253	0.68	289	0.78	-	-	-	-	2	0.01	16	0.0
Posterior Segment	102	0.28	164	0.44	-	-	-	-	1	0.00	2	0.0
High Risk of Blindness Burns	112 129	0.30	128 143	0.35		-	-	-	3 0	0.01	6 1	0.0
Anterior Segment	42	0.33	52	0.39		-	-		0	0.00	0	0.0
Optic or Cranial Nerve	10	0.03	23	0.06	_	-	_	_	1	0.00	2	0.0
'												
Male	4,107	12.93	4,551	14.33	-	-	-	-	17	0.05	65	0.2
Female	692	12.87	755	14.04	-	-	-	-	1	0.02	7	0.1
War	0	0.00	4	0.01					0	0.00	1	0.0
Guns & Explosives	28	0.08	33	0.09					2	0.01	4	0.0
Sports	53	0.14	55	0.15					4	0.01	6	0.0
Machinery & Tools	357	0.96	369	0.99					3	0.01	3	0.0
Land transport	24	0.06	33	0.09		not as	sessed ²		2	0.01	7	0.0
Other transport	3	0.01	4	0.01					1	0.00	1	0.0
Slips, Trips & Falls	109	0.29	120	0.32					2	0.01	4	0.0
Fighting, Assault & Horseplay	48	0.13	64	0.17					3	0.01	9	0.0
Other & Unknown Causes	4,438	11.95	4,933	13.28					17	0.05	64	0.1
ENLISTED (all diagnoses combined)												
Enlisted	3,962	12.52	4,412	13.94	-	-	-	-	17	0.05	63	0.2
<20	191	5.39	228	6.44		_	_	_	1	0.03	5	0.1
20-24	1,356	11.10	1,544	12.64	_	-	_		9	0.03	35	0.2
25-29	864	14.20	966	15.87	_	-	_		4	0.07	12	0.2
30-34	621	14.57	658	15.44	_	-	-	-	3	0.07	8	0.1
35-39	604	16.76	651	18.07	-	-	-	-	0	0.00	2	0.0
>=40	326	16.83	365	18.84	-	-	-	-	0	0.00	1	0.0
E0-E4	1,599	10.47	1,845	12.08	-	-	-	-	13	0.09	42	0.2
E5-E9	2,363	14.43	2,567	15.67	-	-	-	-	4	0.02	21	0.1
Information Community Security	245	10.20	262	11.04					2	0.07	_	0.2
Infantry, Guncrew, Seamen Electronic Equipment Repair	315 516	10.39 12.51	362 569	11.94 13.80	-	-	-	-	2	0.07	7 10	0.2
Communications & Intelligence	325	11.02	364	12.34		-		-	1	0.07	5	0.2
Healthcare	374	14.11	422	15.92	_	-	_		2	0.08	5	0.1
Technical & Other Professional	44	11.08	47	11.84	_	-	_	-	0	0.00	1	0.2
Functional Support & Admin	441	12.08	481	13.17	_	-	_	-	0	0.00	2	0.0
Electrical & Mechanical Repair	1,189	13.27	1,325	14.79	-	-	-	-	6	0.07	22	0.2
Craftwork & Construction	382	21.27	406	22.61	-	-	-	-	1	0.06	5	0.2
Service, Tranport & Supply	232	10.98	260	12.30	-	-	-	-	0	0.00	3	0.1
Students, Trainees & Unknown Enlist	144	7.29	176	8.91	-	-	-	-	2	0.10	3	0.1
OFFICER (all diagnoses combined)												
Officer	837	15.26	894	16.29	-	-	-	-	1	0.02	9	0.1
Officer	037	15.20	054	10.23		-		_		0.02	,	0.1
<20	0	0.00	0	0.00	-	-	_	-	0	0.00	0	0.0
20-24	35	6.07	43	7.45	-	-	-	-	0	0.00	1	0.1
25-29	156	13.01	164	13.68	-	-	-	-	0	0.00	2	0.1
30-34	177	15.26	187	16.13	-	-	-	-	1	0.09	3	0.2
35-39	162	15.17	175	16.38	-	-	-	-	0	0.00	0	0.0
>=40	307	20.70	325	21.92	-	-	-	-	0	0.00	3	0.2
00.00.00	450	10.07	407	14.00						0.00		
O0-O3,W0-W3 O4-O10,W4-W5	462	13.87	497	14.92	-	-	-	-	1	0.03	6	0.1
U4-U10,W4-W5	375	17.39	397	18.42	-	-	-	-	0	0.00	3	0.1
General/Flag Ofc & Executives	6	17.74	6	17.74	_	-	_		0	0.00	0	0.0
Tactical Operations Off.	352	16.93	369	17.74		-	_		0	0.00	2	0.0
Intelligence Off.	26	11.25	31	13.41		-	_	-	0	0.00	0	0.0
Engineering & Maintenance Off.	120	18.27	124	18.88	-	-	-	-	0	0.00	0	0.0
Healthcare Off.	161	14.97	172	15.99	-	-	-	-	1	0.09	6	0.5
Scientists & Professional Off.	23	10.16	27	11.93	-	-	-	-	0	0.00	0	0.0
Administrative Off.	38	14.92	42	16.49	-	-	-	-	0	0.00	0	0.0
Supply & Logistics Off.	55	18.70	58	19.72	-	-	-	-	0	0.00	0	0.0
Ctudents Trainnes 9 University Off	56	8.82	65	10.23	-	-	-	-	0	0.00	1	0.1
Students, Trainees & Unknown Off.												

^{2.} Use of ICD-9-CM E-codes for "cause of injury" is largely incomplete for theater healthcare records and therefore omitted

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Prepared by Armed Forces Health Surveillance Center (AFHSC)
Source: Defense Medical Surveillance System (DMSS) as of 29-MAR-2011





^{3.} Person-time is not available for deployers so the proportion of the total number of diagnoses is shown.